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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/741,960	12/20/2000	Andres Metspalu	18056/00301	7252

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SIDLEY, AUSTIN, BROWN & WOOD
717 N. Harwood, Suite 3400
Dallas, TX 75201

EXAMINER

SISSON, BRADLEY L

ART UNIT	PAPER NUMBER
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1655

DATE MAILED: 12/17/2001

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/741,960

Applicant(s)

METSPALU ET AL.

Examiner

Bradley L. Sisson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-29 is/are pending in the application.
- 4a) Of the above claim(s) 28 and 29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Newly submitted claims 28 and 29 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claims 18-27 are drawn to a device for receiving a light beam from a light source while claim 28 is drawn to a method for detecting and analyzing a specific nucleic acid sequence; and claim 29 which is drawn to a method of analyzing the sequence of a polynucleotide of interest. The device of claims 18-27 is classified in class 435, subclass 287.2, whilst the method of claims 28 and 29 is classified in class 436, subclass 94.

2. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 28 and 29 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Objections

3. Claims 21-27 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 21-27 depend from canceled claim 1.

Response to Amendment

4. The amendment received 04 September 2001, hereinafter the response, presented additional claims 18-29 yet does not identify where support for the newly added limitations are to be found in the disclosure. As set forth in 37 CFR 1.121(b)(2)(iii):

Each amendment when originally submitted must be accompanied by an explanation of the support in the disclosure of the patent for the amendment along with any additional comments on page(s) separate from the page(s) containing the amendment.

Applicant is requested to specifically point to where support for the new claims is found in the original disclosure.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 18-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claims 18-27 are confusing as to just what the claims is to be considered drawn to and what the claimed device is to comprise. From reading the preamble of claim 18 it is noted that the device is one "for receiving a light beam from a light source used in the analysis of biological molecules." The elements identified in claim 1, and in the dependent claims, are not identified in such a manner that they appear to be integrally associated, or bound or coupled to, the receiving

means. Accordingly, it is not clear if the "device" *per se* is to be just that for receiving light or is to comprise the other elements.

8. Claims 18-27 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: That structural relationship that exists between the light receiving means and the upper and lower surfaces of the waveguide. To the extent that claims 20-27 were intended to depend from claim 18 and not that of claim 1, the following rejections apply: The structural relationship that exists between (i) the waveguide, (ii) the light receiving means, (iii) the optical wedge; (iv) the mirror; (v) diffraction grating; (vi) optical prism; (vii) bandpass filters; and (viii) a transparent liquid. While some of the claims do address the functional relationship, and some of the claims speak to the general placement, the connectedness of the various elements so to form a single device is not clear.

9. Claims 21-27 are indefinite as they depend from canceled claim 1.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Squirrell (US Patent 5,750,337).

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Claims 18 and 19 have, for purposes of examination, been interpreted as being directed to "[a] device for receiving a light beam." The other elements recited in the claims are not defined in terms as being part of the "device for receiving a light beam" and have accordingly, not been interpreted as further limiting the "device." In support of this interpretation it is noted that the various elements recited are not defined in terms of any structural relatedness, e.g., how they are connected to one another.

Squirrell discloses a device for use in detecting fluorescent light emitted from labeled DNA and/or RNA as well as other biological chemicals. The waveguide is capable of total internal reflection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent 5,919,712, Herron et al.; and US Patent 6,316,274, Herron et al.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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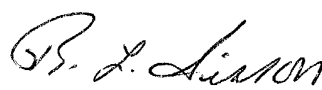
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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley L. Sisson whose telephone number is 703-308-3978. The examiner can normally be reached on Monday through Thursday from 6:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Gary Jones can be reached on 703-308-1152. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3592 for regular communications and 703-308-0294 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1234.



Bradley L. Sisson
Primary Examiner
Art Unit 1655

bls
November 16, 2001